

AMENDMENTS TO THE DRAWINGS

The attached sheet(s) of drawings includes changes to Figure 4.

Attachment: Replacement sheet
 Annotated sheet showing changes

REMARKS

Claims 1, 3, 5-20 and new claim 21 are pending, with claims 1, 3, 5-7 and 15-19 being withdrawn. The amendments are supported in the specification as follows: claim 8: (p.8, lines 8-19; FIGS. 1, 2 and 4) and claim 9: (grammatical amendment). New claim 21 is supported in the specification on p.14, lines 12-15.

Objections to the Drawings

In the Office Action, the drawings were objected for failing to comply with 37 C.F.R. §1.84(p)(5) because Figure 4 does not include items 7 and 8 as mentioned in the written description. (Office Action p. 2)

Figure 4 has been revised to include items 7 and 8. No new matter has been added. It is respectfully requested that this objection be withdrawn.

Claim Rejections – 35 U.S.C. §112

In the Office Action, claims 9 and 20 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicants regard as the invention. (Office Action p. 3)

Claim 9 has been amended as suggested by the Examiner to address this rejection.

Claim Rejections 35 U.S.C. §102

In the Office Action, claims 8 and 14 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,830,893 to Steingiser. (Office Action p. 3)

Steingiser discloses a method of processing high nitrile preforms. In particular, Steingiser teaches heat treating preforms formed of high nitrile polymers with microwave energy to preferentially heat the body portion to orientation temperature:

[T]here has now been discovered a special method for rapidly and selectively molecularly heating special plastic shapes up to orientation temperature in a minimum time period without degrading or adversely affecting the plastic . . . These and other objects are accomplished by providing a high speed method of preparing a molded, heat sensitive article for further forming into a container

which comprises exposing the body portion of a finished neck tubular thermoplastic preform to microwave energy for a period of between $\frac{1}{2}$ to 30 seconds to preferentially heat the body portion from ambient to molecular orientation temperature without deforming the neck and without substantially degrading the thermoplastic.

(Steingiser, col. 2, ln.32-36, 53-61).

Contrary to the claimed invention, however, Steingiser does not disclose a heating section that conforms to a contour line of a portion of the resin molding (W) to be heated, including an end of the portion.

The rejection asserted that Steingiser teaches the claimed “heating section having a shape conforming to a contour line of a portion to be heated of the resin molding,” and pointed to “item 20-figure 2; item 56-figure 4; column 4, lines 23-35” as support. (Office Action, p.3). Figure 4 and column 4, lines 23-35, of Steingiser disclose the following:

In the embodiment of FIG. 4, the electromagnetic field is shaped or configured in a predetermined manner with respect to tubular body portion 12 to perform 10.

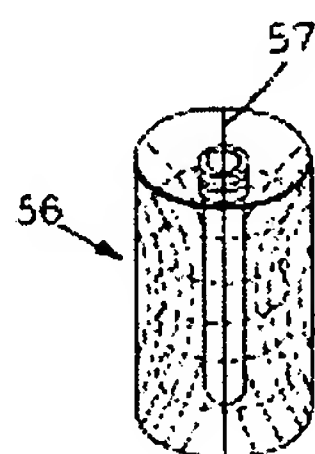


FIG. 4

(Steingiser, col.4, ln.23-25). However, nowhere in those sections, in fact nowhere in Steingiser, is there disclosed a heating section that conforms to the contour line of the portion to be heated so that the heating section surrounds the end of the portion.

The claimed apparatus is unique in that the heating section only “partially heat-treats a parting line portion (W1) of the resin molding or a specific portion of the resin molding (W) which is apt to undergo peeling of a thin surface resin film.” If the heating section were to heat-treat all of the resin molding, which it does not, the resin molding would be disfigured because the heat-treating temperature for the resin molding W is approximately with the range from the heat deformation temperature of resin to the resin molding temperature (see specification p.18, line 8).

It is explained in the published specification:

[0070] In the heat-treating apparatus 1 according to the present invention, by heat-treating the resin molding W partially, not only a residual stress remaining in the resin molding W can be relaxed, but also floating of a thin surface film of the resin molding W can be prevented. The thus heat-treated resin molding W is then plated with resin. For example, the resin molding W is subjected to a pretreatment such as etching treatment or reduction treatment, followed by catalyst treatment and subsequent chemical plating. Then, the resin molding W is further subjected to electroplating and finishing treatment to complete the resin plating. In the thus resin-plated resin molding W, it is possible to prevent the occurrence of such undesirable phenomena as blister and peeling of the plated film.

Nowhere does Steingiser teach the structure now claimed. The reference cannot legally anticipate. It is respectfully requested that the rejection be withdrawn.

In the Office Action, claims 8-10 and 20 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,300,880 to Suzuki. (Office Action p. 4)

Suzuki discloses an orientation-blow molding equipment and jig. In particular, Suzuki teaches heat treating polyethylene terephthalate injected parison or injection-molded piece with IR heating tubes to orient the piece both laterally and longitudinally:

The present invention has as an object to provide an equipment which can produce in a simplified manner plastic containers having excellent strength, toughness and transparency by allowing an injected parison (or injection-molded piece) to be evenly heated and accurately oriented both laterally and longitudinally in the mold.

(Suzuki, col. 1, ln.42-48; *also see*, col. 6, ln.25-28).

Contrary to the claimed invention, however, the shape of Suzuki's heating chamber does not conform at all to a contour line of the article to be heated, let alone an end of the article as show in the drawings. It is impossible for Suzuki to legally anticipate the invention now claimed. It is respectfully requested that the rejection be withdrawn.

Claim Rejections 35 U.S.C. §103

In the Office Action, claim 11 was rejected under 35 U.S.C. §103(a) as being unpatentable over Suzuki in view of U.S. 4,963,086 to Wiatt. (Office Action p. 7)

The rejection cited Wiatt for the disclosure of “a preform transfer assembly, wherein a track and a conveyor belt are used in conjunction with each other.” (Office Action, p.7). In particular, Wiatt discloses a reheat blow molding machine. However, Wiatt does not disclose a heating section that conforms to a contour line of a portion of the resin molding (W) to be heated, including an end of the portion.

Without more, Wiatt combined with Suzuki fails to make the claimed invention obvious. Wiatt does not make up for the deficiencies of Suzuki described above. The combination of references fails to establish a *prima facie* rejection of obvious.

It is respectfully requested that the rejection be reconsidered and withdrawn.

In the Office Action, claim 12 was rejected under 35 U.S.C. §103(a) as being unpatentable over Suzuki in view of U.S. Patent No. 3,554,506 to Seefluth and further in view of U.S. Patent No. 3,162,895 to Pusch. (Office Action p. 7)

The rejection cited Seefluth for the disclosure of heating preforms by circulating hot air, and Pusch for the disclosure of “the heating element . . . in the shape of the pipe and includ[ing] a plurality of perforations . . . through which hot air or steam is fed to cure the piping insulation.” (Office Action, p.8).

In particular, Seefluth discloses a heating block which rapidly heats thick wall parison preforms, while Pusch discloses circulating hot air through perforations in a pipe to set the binder contained in the pipe insulation. (Seefluth, Abstract; Pusch, col. 4, ln.42-54). Neither Seefluth nor Pusch discloses a heating section that conforms to a contour line of a portion of the resin molding (W) to be heated, including an end of the portion.

Without more, Seefluth and Pusch combined with Suzuki fail to make the claimed invention obvious. Seefluth and Pusch do not make up for the deficiencies of Suzuki described above, thus a *prima facie* rejection of obvious has not been established.

It is respectfully requested that the rejection be reconsidered and withdrawn.

In the Office Action, claim 13 was rejected under 35 U.S.C. §103(a) as being unpatentable over Suzuki in view of U.S. Patent No. 5,032,700 to Sugiyama. (Office Action p. 9)

The rejection cited Sugiyama for the disclosure of "the use of inductive heating coils to heat the heating section used for heating performs." (Office Action, p.9). In particular, Sugiyama discloses a heating method for forming a thermoplastic material or bottle. However, Sugiyama does not disclose a heating section that conforms to a contour line of a portion of the resin molding (W) to be heated, including an end of the portion.

Without more, Sugiyama combined with Suzuki fails to make the claimed invention obvious. Sugiyama does not make up for the deficiencies of Suzuki described above. The combination of references fails to establish a *prima facie* rejection of obvious.

It is respectfully requested that the rejection be reconsidered and withdrawn.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105.

Dated: December 8, 2008

Respectfully submitted,

Customer No. 21874

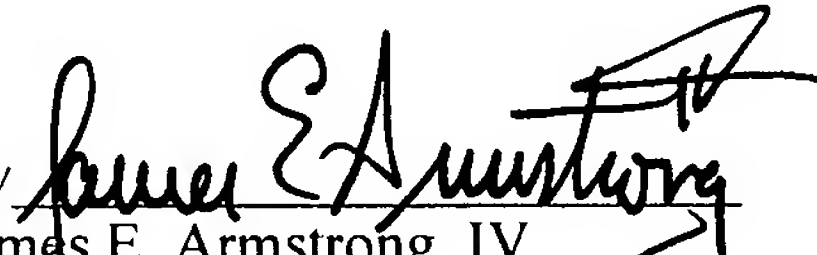
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FIG.3

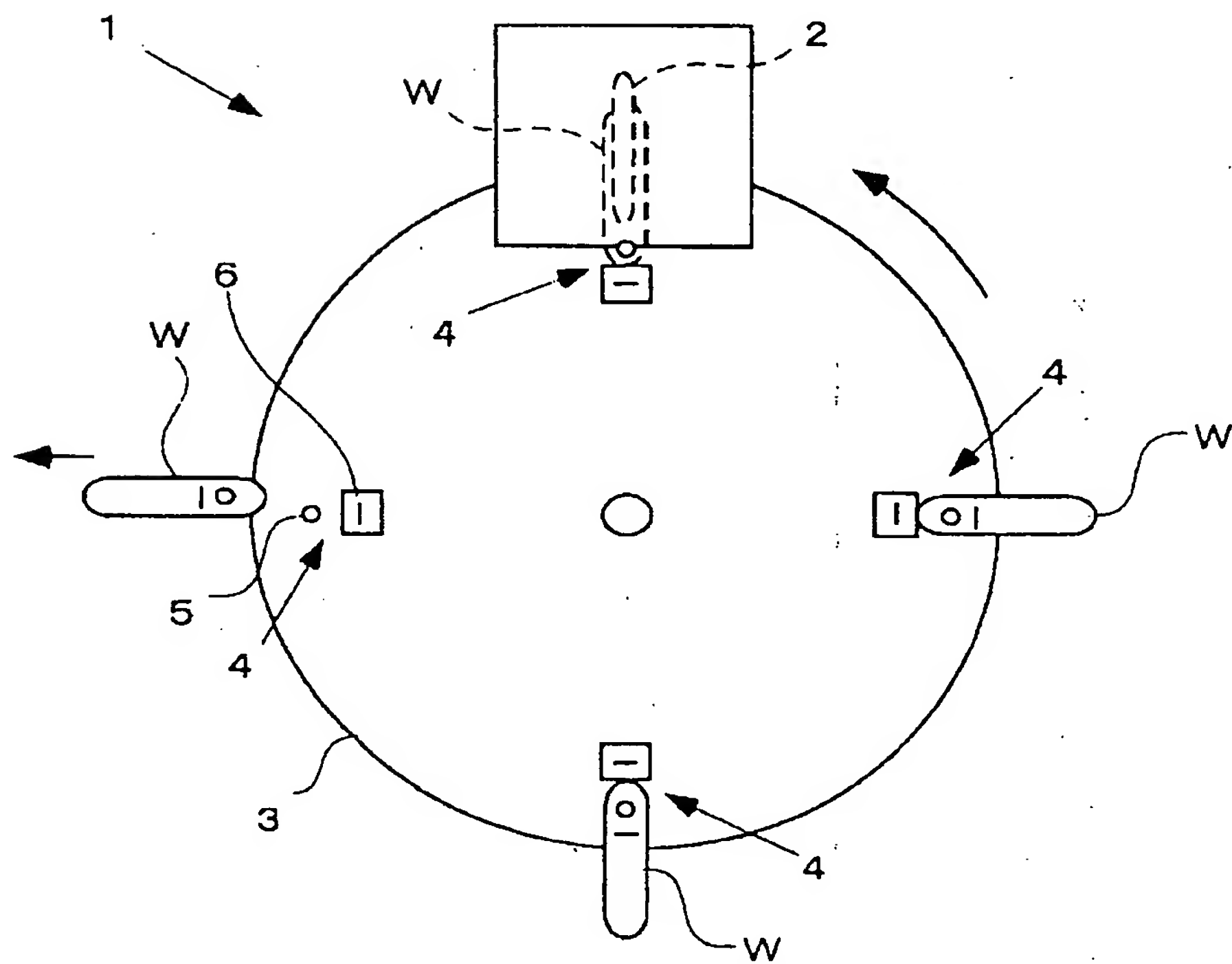


FIG.4

